Title (en)

LIQUID TREATMENT SYSTEM

Title (de)

FLÜSSIGKEITSBEHANDLUNGSSYSTEM

Title (fr)

SYSTÈME DE TRAITEMENT D'UN LIQUIDE

Publication

EP 2222606 A4 20120328 (EN)

Application

EP 08868425 A 20081217

Priority

- IB 2008055394 W 20081217
- US 96313907 A 20071221

Abstract (en)

[origin: US2009162258A1] A liquid treatment system has a housing defining an interior space. The housing has an inlet port for receiving liquid into the interior space of the housing and an outlet port for allowing liquid to exit the interior space of the housing. The outlet port is spaced from the inlet port so that liquid flows through the interior space of the housing from the inlet port to the outlet port. An ultrasonic waveguide assembly is disposed within the interior space of the housing and includes an ultrasonic horn disposed at least in part intermediate the inlet port and the outlet port of the housing. The ultrasonic horn is operable at an ultrasonic frequency to ultrasonically energize liquid flowing within the housing. An ultraviolet light source emits ultraviolet light into the interior space of the housing to treat liquid flowing therein.

IPC 8 full level

A61L 2/025 (2006.01); **A61L 2/10** (2006.01); **C02F 1/32** (2006.01); **C02F 1/36** (2006.01); **C02F 1/72** (2006.01)

CPC (source: EP KR US)

B01J 19/008 (2013.01 - EP US); **B01J 19/10** (2013.01 - EP KR US); **B01J 19/123** (2013.01 - EP US); **C02F 1/325** (2013.01 - EP US); **C02F 1/36** (2013.01 - EP US); **C02F 1/722** (2013.01 - EP US); **C02F 1/78** (2013.01 - EP US); C02F 2201/3228 (2013.01 - EP US); C02F 2201/326 (2013.01 - EP US); C02F 2303/04 (2013.01 - EP US); C02F 2305/023 (2013.01 - EP US)

Citation (search report)

- [XI] WO 2005014489 A1 20050217 - BUETTNER KLAUS [DE]
- [XI] US 6617588 B1 20030909 - SATO CHIKASHI [US]
- [XI] EP 1375432 A1 20040102 - FUJI ELECTRIC CO LTD [JP]
- See references of WO 2009083874A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

US 2009162258 A1 20090625; **US 8858892 B2 20141014**; BR PI0819582 A2 20150505; BR PI0819582 B1 20181204; BR PI0819582 B8 20190806; CN 101952207 A 20110119; CN 101952207 B 20120912; EP 2222606 A2 20100901; EP 2222606 A4 20120328; EP 2222606 B1 20150812; KR 20100107450 A 20101005; WO 2009083874 A2 20090709; WO 2009083874 A3 20091112

DOCDB simple family (application)

US 96313907 A 20071221; BR PI0819582 A 20081217; CN 200880121407 A 20081217; EP 08868425 A 20081217; IB 2008055394 W 20081217; KR 20107013382 A 20081217